Abstract:

The invention relates to a process for the production of a polymer layer of a flexible unbonded offshore pipe. The process comprises the steps of shaping a polymer material by extrusion into or onto a supporting unit in an extrusion station and cross-linking said extruded polymer material, said polymer material comprising a polyethylene and a peroxide for providing a cross-linking of the polymer material. The peroxide has an activation temperature substantially above the temperature of the polymer material during the extrusion thereof. The cross-linking of the extruded polymer material is carried out by exposing the extruded polymer material to electromagnetic waves, selected from the group consisting of infrared radiation and microwave.

The invention also relates to a flexible unbonded offshore pipe comprising such polymer layer.